

REMARKS

Favorable reconsideration of this application as amended is respectfully requested.

Claims 1, 3, 8-11, 14-16, 21, 22, 23 and 28 have been amended. Claims 6, 7 and 19 have been canceled. Claims 1-5, 8-18 and 20-28 remain active in the application. Claim 28 has been rejected under 35 U.S.C §112, second paragraph. Claims 1-7, 14, 16, 19, 20 and 24-26 have been rejected under 35 U.S.C. §102(b) as being anticipated Degnan et al. Claims 1-7, 14-16, 19, 20, and 24-26 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Degnan et al. in view of Krawczyk. The Examiner has indicated that claims 8, 10-13, 22, 23 and 27 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Examiner has objected to the drawing (Figure 2) because the gears are not angled and appear to be normal bevel gears and the wedge angle needs to be shown. Applicant has modified Figures 2(a) and 2(c) so as to show the angled bevel gears and the wedge angle respectively. Applicant believes the drawings are now in compliance with the requirements of 37 CFR 1.83(a).

Rejection Under 35 U.S.C. § 112

The Examiner has rejected claim 28 under 35 U.S.C. §112, second paragraph as being indefinite. Applicant has amended claim 28 to include the recitation "processing signals responsive to the returned beam." Amended claim 28 positively recites the claimed invention and thus obviating the rejection under 35 U.S.C §112.

Rejection Under 35 U.S.C. § 102(b)

Examiner has rejected claims 1-7, 14, 16, 19, 20 and 24-26 under 35 U.S.C. §102(b) as being anticipated by Degnan et al. Applicant has amended independent claim 1 to include the limitations recited in claim 8. Claim 8 has been placed in independent form as the Examiner has indicated that claim 8 would be allowable if placed in independent form. Claims 9-15 are believed to be allowable over the prior art of record as these claims depend from amended claim 8, which is believed to be allowable. Claim 16 has been amended to include the limitations recited in claim 8. Thus, claim 16 is also believed to be allowable.

Rejection Under 35 U.S.C. § 103(a)

Claims 1-7, 14-16, 19, 20 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degnan et al.(Design and Performance of an Airborne Multikilohertz Photon-Counting Microlaser Altimeter) in view of Krawczyk (5,726,743). The Examiner has indicated that claim 8 would be allowable if placed in independent form including all the limitations of the base claim. Applicant has amended claims 1, 8 and 16 to include

the limitations of claim 8 in independent form. Thus, amended claims 1, 8 and 16 are allowable over the prior art of record. Moreover, claims 2-5, 14-15 that depend from independent claims 1, 8 and 16 are also allowable over the prior art of record. Claims 20 and 24-26 now depend from claim 21 and are believed to be allowable for the reasons described below for claim 21. Applicant respectfully request that Examiner withdraw the 103(a) rejection of Claims 1-5, 14-6, 20, and 24-26 over Degnan in view of Krawczyk

Claims 9, 17, 18 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Degnan et al. (Design and Performance of an Airborne Multikilohertz Photon-Counting Microlaser Altimeter) in view of Krawczyk (5,726,743) and further in view of Green. To establish a prima facie case of obviousness under 35 U.S.C. § 103, three basic criteria must be satisfied. First, "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." M.P.E.P. § 2143. "Second, there must be a reasonable expectation of success." *Id.* Third, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." *Id.*

Degnan et al., Krawczyk and Green do not teach or suggest the limitations recited in claims 9, 17, 18 and 21. Specifically, neither Degnan et al., Krawczyk nor Green teach or disclose optical scanners that comprise a central portion and an annular portion such that the phases of the central portion of the first and second optical wedges are advanced relative to the phases of their respective annular portions as required by Claims 9, 17, 18, and 21 of the present invention. The Examiner simply states that the limitations recited in these claims are obvious without establishing a prima facie case of obviousness. Because the prior art references do not teach or suggest the limitations recited in claims 9, 17, 18 and 21 the basic criteria to establish obviousness have not been met. As such, Applicant respectfully requests that the Examiner withdraw the Section 103 (a) rejection of Claims 9, 17, 18 and 21 for the reasons stated herein. Thus, amended claims 9 and 21 and original claims 17 and 18 are believed to be allowable over the prior art of record. Likewise, claims 10-13, 20, and 22-28 that depend from one of claims 9, 17, 18 and 21 are believed to be allowable over the prior art of record.

In view of the forgoing, claims 1-5, 8-18 and 20-28 are believed to be in condition for allowance and such favorable consideration is courteously solicited.

The number of independent claims has increased by one and the number of dependent claims has decreased by four. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 14-0116.

Should any unresolved issues remain to the allowance of this application, the Examiner is invited to contact Applicant's representative who may be reached at (301) 286-9279.

Respectfully submitted,



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CERTIFICATE OF FACSIMILE

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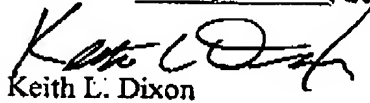
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